

REMARKS

Amendment of Claims

Independent Claims 80, 87, 97, 105, 109 and 113 have been amended to recite that the sealing composition is incompatible with the display fluid. This amendment is supported by the disclosures, for example, at page 4, lines 10-10.

All other amendments are made for clarity purpose.

No new matter is introduced.

Request to Withdraw Finality

Applicants believe that the Finality of the Office Action is improper because the Examiner has introduced several new grounds of rejection that are not necessitated by applicants' amendment of the claims. In the Response to Office Action dated October 4, 2005, Claims 80-83 were NOT amended. The three newly cited references against Claims 80-83 are NOT necessitated by Applicants' amendments. Therefore, Applicants request that the Examiner withdraw the finality of the instant Office Action.

Claim Rejections – 35 USC §112, Second Paragraph

Claims 106 and 110 have been cancelled.

Claim 109 has been amended to provide proper antecedent basis.

Therefore, the 35 USC §112, second paragraph rejection of Claim 109 should be withdrawn.

Claim Rejections - 35 USC §103(a)

(1) Claims 80-83, 105-109 and 111-112

Claims 80-83, 105-109 and 111-112 are rejected under 35 USC 103(a) as allegedly being unpatentable over Comiskey et al (US 6,327,072) in view of Tahara et al (US 5,908,899), as evidenced by Hall (US 4,135,789).

a. Comiskey et al and Tahara et al do not disclose a top-sealing layer as defined in the present application:

Comiskey et al disclose an electrophoretic display with microcells. The Examiner alleges that Comiskey et al disclose a top-sealing layer. Applicants respectfully disagree. First of all, the term “top-sealing”, in the context present invention, does not only refer to the position of the sealing layer. The term also refers to a special feature of the present invention, i.e., the top-sealing layer is applied to the display cells before a second substrate or electrode layer is disposed thereon (see page 10, lines 3-9 of the application). The top layer (14) of Comiskey et al, however, is not a “top-sealing” layer, as defined in the present application. The top layer (14) of Comiskey et al in fact is part of a top substrate (26) which also includes a second electrode (24) (see column 10, lines 49-52) and the top layer and the second electrode (collectively referred to as the top substrate) are applied together to the microcells (see column 12, lines 59-62 and column 13, lines 26-28 and lines 58-61). Comiskey et al mention the possibility of having only one layer (e.g., a second electrode). However, nowhere in Comiskey et al discloses or suggests the possibility of applying the top layer (14) and the second electrode (24) separately and moreover, applying the top layer (14) before the second electrode.

Tahara et al disclose a resin composition for sealing liquid crystal cells. In Tahara et al, a resin composition is first applied to two glass substrates, followed by curing the resin composition (see column 8, lines 27-37). The liquid crystal is then charged between the two adhered glass substrates through a liquid crystal charging port and, after filling, the charging port is sealed.

Therefore, neither Comiskey et al nor Tahara et al disclose a top-sealing layer as defined by the present application.

b. Comiskey et al and Tahara et al do not disclose a sealing composition that is incompatible with a display fluid.

In Comiskey et al, the top substrate including the top layer is positioned over the open end of the microcells and a roller presses the layers together (see column 12, lines 59-62), followed by a bonding step (see column 13, line 1) or alternatively a porous top substrate is laid across the microcells and bonded or fused to the tops of the cell walls (see column 13, lines 26-28 and lines 58-61). Comiskey et al do not disclose that the sealing composition is incompatible with the display fluid.

Tahara et al, as stated above, disclose a resin composition which is first applied to two glass substrates, followed by curing the resin composition (see column 8, lines 27-37). The liquid crystal is then charged between the two adhered glass substrates through a liquid crystal charging port and, after filling, the charging port is sealed. This reference also does not disclose a sealing composition that is incompatible with a display fluid.

c. Tahara et al and Comiskey et al do not disclose or suggest the sealing composition of the present invention, as alleged by the Examiner.

The resin composition of Tahara et al has one essential component which is a rubber-modified unsaturated compound. This modified rubber is obtained by grafting a monomer having at least one polymerizable ethylenically unsaturated bond in a molecule with at least one rubber (see, for example, abstract, column 3, lines 36-44, and Synthetic Examples 1-7). In addition to the rubber-modified unsaturated compound, the resin composition of Tahara et al may comprise other additives such as a coupling agent, a filler and a photopolymerization initiator. The composition as a whole is radiation curable (see, for example, column 3, lines 65 to column 4, line 2 and examples). Tahara et al do not disclose a sealing composition comprising a radiation curable composition and a high dielectric polymer or oligomer. Nor do Comiskey et al disclose a composition comprising a radiation curable composition and a high dielectric polymer or oligomer.

d. Hall does not cure the deficiency of Comiskey et al and Tahara et al.

Hall discloses a hermetic glass seal to provide the final seal for the fill ports in the glass walls of a display device such as a liquid crystal display. Clearly Hall does not disclose the concept of “top-sealing” as defined in the present application, a sealing composition which is incompatible with a display fluid, or a sealing composition as described in the present claims.

Accordingly, the 103(a) rejection of independent Claims 80, 105 and 109 and claims dependent therefrom, namely, Claims 81-83, 106-108, 111 and 112, should be withdrawn.

(2) Claims 87-89, 90-93, 97-100 and 113-119

Claims 87-89, 90-93, 97-100 and 113-119 are rejected under 35 USC 103(a) as allegedly being unpatentable over Comiskey et al (US 6,327,072) in view of Tahara et al (US 5,908,899) and Yamazaki et al (US 6,118,502), as evidenced by Hall (US 4, 135,789).

The discussion above of Comiskey et al, Tahara et al and Hall is also applicable to the claims in question.

Yamazaki et al disclose a method using a temporary substrate to attach components to a display substrate when fabricating a passive type display device. This reference does not cure the deficiency of Comiskey et, Tahara et al and Hall.

Accordingly, the 103(a) rejection of independent Claims 87, 97 and 113 should be withdrawn. Claims dependent from the allowable independent claims, namely Claims 88-93, 98-100 and 114-119 are also allowable.

(3) Claims 103-104

Claims 103-104 are rejected under 35 USC 103(a) as being allegedly unpatentable over Comiskey et al in view of Tahara et al and Yamazaki et al, as evidenced by Hall, as applied to claims 87-89, 90-93, 97-100 and 113-119, and further in view of Verlinden et al (US 6,092,392).

The discussion above of Comiskey et al, Tahara et al, Hall and Yamazaki et al is also applicable to the claims in question.

Verlinden et al disclose a process for producing thin glass on roll. This reference does not cure the deficiency of Comiskey et, Tahara et al, Yamazaki et al and Hall.

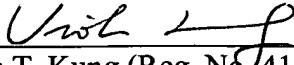
Accordingly, claims dependent from the allowable independent Claims 87 and 97, namely Claims 103 and 104, are also allowable.

CONCLUSION

Applicants believe that the application is in good and proper condition for allowance.
Early notification of allowance is earnestly solicited.

Respectfully submitted,

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